



## CITY OF LODI

## COUNCIL COMMUNICATION

AGENDA TITLE: Specifications and Advertisement for Bids for 600-Volt Underground Triplex for the Electric Utility Department (\$24,000)

MEETING DATE: December 15, 1993

PREPARED BY: Electric Utility Director

RECOMMENDED ACTION: That the City Council approve the specifications and authorize advertisement for bids for 12,000 feet of #1/0 underground triplex, and 10,000 feet of 350Kcmil underground triplex, for use in the Electric Utility Department's distribution system.

BACKGROUND INFORMATION: The Electric Utility Department's Engineering Division is processing work orders to install electrical service in new subdivisions in the City. Installation locations include Lodi West Unit 1, Johnson Ranch Unit 2, Century Meadows Units 2 and 3, and Towne Ranch Unit 1.

As these installations deplete wire stocks, this bid will replenish inventories at a time when relatively low industry demand has resulted in extremely competitive wire prices.

FUNDING: Estimated cost: \$24,000.  
Budget: Electric Utility Operating Fund

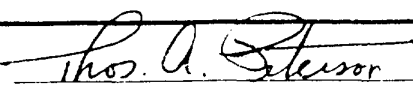
BID OPENING DATE: January 5, 1994

  
Henry J. Rice, Electric Utility Director

cc: Assistant Electric Utility Director  
Electrical Engineer

Prepared by Joel Harris, Purchasing Officer

APPROVED: \_\_\_\_\_

  
THOMAS A. PETERSON  
City Manager



EQUIPMENT SPECIFICATIONS

REV. 4/10/90

600-VOLT XLPE TRIPLEX CABLE

GENERAL:

CABLE FURNISHED UNDER THESE SPECIFICATIONS SHALL BE LIMITED TO CROSS-LINKED POLYETHYLENE INSULATED CABLE RATED 600 VOLTS AND SUITABLE FOR INSTALLATION IN DUCTS OR FOR DIRECT BURIAL IN EARTH, IN WET OR DRY LOCATIONS, WITH NORMAL CONDUCTOR TEMPERATURES UP TO 90 DEGREES C. CABLES FURNISHED SHALL MEET THE REQUIREMENTS OF THE APPLICABLE NEMA, ICEA, AEIC AND ASTM STANDARDS, LATEST EDITION THEREOF, UNLESS OTHERWISE NOTED IN THIS SPECIFICATION.

CABLE:

A. CONDUCTOR:

THE CONDUCTOR SHALL BE ALUMINUM ALLOY, EC GRADE, 1/2 TO 3/4 HARD, CLASS B STRANDING.

B. INSULATION:

PHASE CONDUCTOR INSULATION SHALL BE SINGLE-PASS, BLACK, CROSS-LINKED POLYETHYLENE. THE NEUTRAL CONDUCTOR SHALL HAVE YELLOW XLPE INSULATION OR BLACK XLPE INSULATION WITH YELLOW EXTRUDED STRIPES.

C. ASSEMBLY:

THE ASSEMBLED CABLE SHALL CONSIST OF PHASE AND NEUTRAL CONDUCTORS TWISTED TOGETHER WITH A LAY NOT LESS THAN 50 NOR MORE THAN 60 TIMES THE OUTSIDE DIAMETER OF ONE OF THE PHASE CONDUCTORS. ALL CABLE ENDS SHALL BE SEALED TO PREVENT THE ENTRANCE OF MOISTURE.

D. IDENTIFICATION:

EACH CONDUCTOR SHALL HAVE A PERMANENT MARKING SHOWING THE MANUFACTURER'S NAME, VOLTAGE RATING, CONDUCTOR SIZE AND TYPE OF INSULATION.

E. TESTING AND GUARANTEE:

TESTING OF CABLE SHALL BE PERFORMED ACCORDING TO PROCEDURES SET FORTH BY THE ICEA, AEIC AND ASTM. CERTIFIED COPIES OF PASS/FAIL TEST RESULTS SHALL BE SUPPLIED. ANY CABLE FOUND DEFECTIVE EITHER UPON INSPECTION, TESTING OR INSTALLATION WILL BE RETURNED AT THE MANUFACTURER'S EXPENSE.

F. SPECIFIC REQUIREMENTS:

ANY CONDITIONAL BIDS SUCH AS "SUBJECT TO AVAILABILITY IN STOCK" WILL BE REJECTED.

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600-VOLT XLPE TRIPLEX CABLE  
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G. SHIPPING:

CABLE ENDS SHALL BE ADEQUATELY SEALED WITH A WATER SEAL-TYPE MATERIAL AND PLASTIC END CAPS SECURED BY TAPE TO PREVENT THE PENETRATION OF MOISTURE. THERE SHALL BE NO WATER IN THE STRANDED CONDUCTOR OF THE CABLE WHEN THE REEL IS SHIPPED. ALL SHIPMENTS SHALL BE PREPAID, F.O.B. LODI, CALIFORNIA. REELS SHALL BE SHIPPED UPRIGHT.

REELS:

A. MAKEUP:

THE SPECIFIED CONDUCTOR SHALL BE SUPPLIED ON NEMA STANDARD REELS AND IN ACCORDANCE WITH TABLE I AS SHOWN BELOW.

TABLE I

CONDUCTOR SIZE PHASE (NEUTRAL)	CODE WORD	MATERIAL	NEMA STANDARD REEL CODE NO.
#2 (#2) AWG	RAMAPO/YES	ALUM	3624
#1/0 (#1/0) AWG	BERGEN/YES	ALUM	3624
350Kcmil (#4/0) AWG	WESLEYAN/YES	ALUM	5432 OR 7236

B. PACKAGING:

EACH REEL SHALL HAVE ADEQUATE PROTECTIVE COVERING ACROSS THE FLANGES, SUCH COVERING TO CONSIST OF WOOD MEMBERS FROM FLANGE TO FLANGE COVERING THE ENTIRE CIRCUMFERENCE OF THE REEL (LAGGING). THE LAGGING SHALL BE NAILED TO THE FLANGE PERIMETERS AND SHALL BE FURTHER SECURED WITH AT LEAST TWO STEEL BANDS AROUND THE REEL. EACH END OF THE CABLE SHALL BE FIRMLY SECURED TO THE REEL.

C. MARKING:

EACH REEL SHALL BE MARKED WITH A DURABLE LABEL SECURELY ATTACHED TO A FLANGE OF THE REEL AND PLAINLY MARKED STATING THE DESTINATION, THE PURCHASER'S ORDER NUMBER, SHIPPING LENGTH OF CABLE ON REEL, TYPE AND SIZE OF CONDUCTORS, INSULATION TYPE AND THICKNESS, VOLTAGE RATING AND MANUFACTURER'S IDENTIFICATION NUMBER.